What is claimed is:

1. A method for fabricating a prism that comprises a first and a second substrate, both translucent, bonded together with an optical thin film interposed at an interface in between and that is used with the interface inclined relative to an optical axis of incident laser light of a wavelength of 420 nm or shorter, comprising the step of:

bonding together the first and second substrates of which a difference $\Delta N1$ in refractive index at the wavelength of the laser light fulfills the following condition:

$$\Delta N1 \leq | 1 / (0.3 \times 10^4 \times NA \times t) |$$

where

t represents a thickness of the first and second substrates cemented together as measured along the optical axis of the laser light; and

NA represents a numerical aperture of the incident laser light.

2. A method for fabricating a prism as claimed in claim 1, the prism further comprising a third substrate that is bonded to the second substrate with an optical thin film interposed at an interface in between, the method further comprising the step of:

bonding together the second and third substrates of which a difference $\Delta N2$ in refractive index at the wavelength of the laser light fulfills the following condition:

$$\Delta N2 \leq | 1 / (0.3 \times 10^4 \times NA \times t) |$$

3. A method for fabricating a prism as claimed in claim 1,

wherein the optical thin film is one of a polarizing beam splitter film, a beam splitter film, a dichroic film, an anti-reflection film, and a total-reflection film.

4. A method for fabricating a prism that comprises a first and a second substrate, both translucent, bonded together with an optical thin film interposed at an interface in between and that is used with the interface inclined relative to an optical axis of incident laser light of a wavelength of 420 nm or shorter, comprising the step of:

bonding together the first and second substrates of which a difference in refractive index at the wavelength of the laser light is 1 / 300 or smaller.

5. A method for fabricating a prism as claimed in claim 4, the prism further comprising a third substrate that is bonded to the second substrate with an optical thin film interposed at an interface in between, the method further comprising the step of:

bonding together the second and third substrates of which a difference in refractive index at the wavelength of the laser light is 1 / 300 or smaller.

6. A method for fabricating a prism as claimed in claim 4,

wherein the optical thin film is one of a polarizing beam splitter film, a beam splitter film, a dichroic film, an anti-reflection film, and a total-reflection film.

7. A method for fabricating a prism that comprises a first and a second substrate, both translucent, bonded together with an optical thin film interposed at an interface in between and that is used with the interface inclined relative to an optical axis of incident laser light of a wavelength of 420 nm or shorter, comprising the step of:

bonding together the first and second substrates of which a difference in refractive index at the wavelength of the laser light is 1 / 1 500 or smaller.

8. A method for fabricating a prism as claimed in claim 7, the prism further comprising a third substrate that is bonded to the second substrate with an optical thin film interposed at an interface in between, the method further comprising the step of:

bonding together the second and third substrates of which a difference in refractive index at the wavelength of the laser light is 1 / 1 500 or smaller.

9. A method for fabricating a prism as claimed in claim 7,

wherein the optical thin film is one of a polarizing beam splitter film, a beam splitter film, a dichroic film, an anti-reflection film, and a total-reflection film.

10. A method for fabricating an optical system comprising a light source that emits laser light of a wavelength of 420 nm or shorter and a prism that comprises a first and a second substrate, both translucent, bonded together with an optical thin film interposed at an interface in between and that is used with the interface inclined relative to an optical axis of incident laser light of a wavelength of 420 nm or shorter, comprising the step of:

bonding together the first and second substrates of which a difference $\Delta N1$ in refractive index at the wavelength of the laser light fulfills the following condition:

$$\Delta N1 \leq | 1 / (0.3 \times 10^4 \times NA \times t) |$$

where

t represents a thickness of the first and second substrates cemented together as measured along the optical axis of the laser light; and

NA represents a numerical aperture of the incident laser light.

11. A method for fabricating an optical system as claimed in claim 10, the prism further comprising a third substrate that is bonded to the second substrate with an optical thin film interposed at an interface in between, the method further comprising the step of:

bonding together the second and third substrates of which a difference $\Delta N2$ in refractive index at the wavelength of the laser light fulfills the following condition:

$$\Delta N2 \leq | 1 / (0.3 \times 10^4 \times NA \times t) |$$

12. A method for fabricating an optical system as claimed in claim 10,

wherein the optical thin film is one of a polarizing beam splitter film, a beam splitter film, a dichroic film, an anti-reflection film, and a total-reflection film.

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13. A method for fabricating an optical system comprising a light source that emits laser light of a wavelength of 420 nm or shorter and a prism that comprises a first and a second substrate, both translucent, bonded together with an optical thin film interposed at an interface in between and that is used with the interface inclined relative to an optical axis of incident laser light of a wavelength of 420 nm or shorter, comprising the step of:

bonding together the first and second substrates of which a difference in refractive index at the wavelength of the laser light is 1 / 300 or smaller.

14. A method for fabricating an optical system as claimed in claim 13, the prism further comprising a third substrate that is bonded to the second substrate with an optical thin film interposed at an interface in between, the method further comprising the step of:

bonding together the second and third substrates of which a difference in refractive index at the wavelength of the laser light is 1 / 300 or smaller.

15. A method for fabricating an optical system as claimed in claim 13,

wherein the optical thin film is one of a polarizing beam splitter film, a beam splitter film, a dichroic film, an anti-reflection film, and a total-reflection film.

16. A method for fabricating an optical system comprising a light source that emits laser light of a wavelength of 420 nm or shorter and a prism that comprises a first and a second substrate, both translucent, bonded together with an optical thin film interposed at an interface in between and that is used with the interface inclined relative to an optical axis of incident laser light of a wavelength of 420 nm or shorter, comprising the step of:

bonding together the first and second substrates of which a difference in refractive index at the wavelength of the laser light is 1 / 1 500 or smaller.

17. A method for fabricating an optical system as claimed in claim 16, the prism further comprising a third substrate that is bonded to the second substrate with an optical thin film interposed at an interface in between, the method further comprising the step of:

bonding together the second and third substrates of which a difference in refractive index at the wavelength of the laser light is 1 / 1 500 or smaller.

18. A method for fabricating an optical system as claimed in claim 16, wherein the optical thin film is one of a polarizing beam splitter film, a beam splitter film, a dichroic film, an anti-reflection film, and a total-reflection film.